

Eleven lessons: managing design in eleven global brands

Design at BSkyB

A pioneer in the delivery of multi-channel television in the UK, BSkyB has recognised the potential to use design as a market differentiator. While continuing to evolve its product offering, BSkyB has focused on developing in-house design management capability while building a strong relationship with an external design consultancy for the execution of product designs.

Overview

As a pioneer in the delivery of multi-channel television in the UK, BSkyB has continued to evolve its product offering, being an early adopter of interactive television services, downloadable TV content via broadband and hard-disc based video recording systems to allow subscribers to pause live TV and record large quantities of content for later viewing.



BSkyB has its own brand management department, but no in-house product designers. All product design activities are outsourced, but the external consultancies are managed by Ed Snodgrass, the Product Design Manager at BSkyB, who is also responsible for liaison with manufacturers.

Key elements of BSkyB's product design strategy include:

- Ensuring the commissioned agency had a crucial understanding of the brand and positioning, and briefing them to incorporate brand identity into product design
- Developing a formal design language to give all products a consistent brand identity
- Working with its external agency partner during early market position, user behaviour and concept development phases
- Creating separate identities for individual product lines based on the requirements of their specific markets
- Developing a policy for visually identical products with multiple simultaneous manufacturing partners, using different internal electronics

- Getting buy-in from senior management (and a direct link to CEO) which makes it easier to justify investment in design and gives it a higher status within the organisation.

The company has its own innovation manager, who is responsible for generating ideas and for encouraging innovation throughout the wider organisation through innovation workshops and related activities.

History

BSkyB was formed by the merger of two early incumbents in the UK multi-channel TV market.

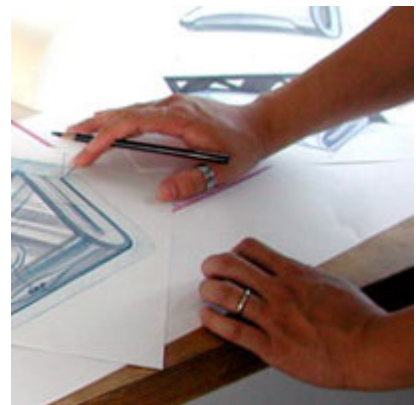
Sky, launched in 1989, originally offered four TV channels to subscribers using the Astra communications satellite. Rival British Satellite Broadcasting launched a year later and quickly merged with Sky to form the basis of today's organisation. BSkyB grew rapidly over the rest of the decade. By 1995 it had more than five million subscribers and offered them 23 channels. In 1999, free Sky set top boxes and mini-dishes helped Sky digital become the fastest growing digital platform in Europe, acquiring over 1.2 million subscribers in just 10 months.

The evolution of design at BSkyB

BSkyB operates in an increasingly crowded market. Many customers now have multiple options for TV delivery from digital broadcast services, cable and satellite. They are also consuming media in different ways on new devices.

Some audiences are moving away from traditional pushed media such as TV and radio towards more interactive forms including electronic games and user generated content channels.

BSkyB has developed a range of set top boxes and associated remote controls, that enable much of the user functionality of the company's pay-TV-services, as well as handling channel decryption, subscriber identification and, in some cases, recording functionality.



Design process evolution

BSkyB's set top boxes are produced by multiple manufacturers and originally the design of the boxes was left entirely to the manufacturers' discretion. Around three years ago, however, there was a change of attitude among BSkyB's senior management, who recognised that the set top box was a highly visible element of the company's presence in the customer's home and could benefit from a consistent brand identity. BSkyB

organised a competitive pitch, evaluated ideas from three agencies and eventually selected Frog to develop the design of its new set top box range. To do this, BSkyB recognised it would need design management capability, so it recruited Ed Snodgrass, who has a background of product design at an electronics specialist, to lead the project.

Organisational position and influence

Snodgrass operates in BSkyB's Strategic Product Development department, which is responsible for the development of all aspects of the company's set top box offerings, including hardware and software. Unusually for a functional department head, Snodgrass has a direct link to James Murdoch, the company's CEO.

The company also has an R&D department, which focuses on future orientated developments such as new cabling solutions or new ways of getting satellite signals into the home, and a consumer technology department, which manages the engineering standards of its delivery mechanisms. Snodgrass has a close relationship with this latter department, ensuring that new generations of set top box are evolving with the capability to handle the latest functionality.

Status

Today British Sky Broadcasting (BSkyB) operates the UK's largest multi-channel television platform. In 2006, the company had just over 13,000 employees, a turnover of £4,148 million and an operating profit of £877 million. The company had more than eight million TV subscribers in 2006, a growth of 389,000 in the year. (Source: 2006 Annual Report).

BSkyB case study: discover

For the set top box project, Ed Snodgrass, Product Design Manager at BSkyB, worked with the company's product development managers to prepare a brief for design consultancy Frog.

The company wanted to develop a series of three separate set top box units, offered at different price points and with different capabilities. Each unit was to have its own distinct identity, but they should share a common design language.

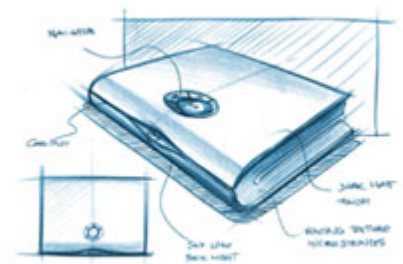
BSkyB's aims included:

- Differentiating its set top boxes from other entertainment products in consumers' homes
- Reflecting the high end technology within the set top box, but remaining usable by anyone from 7 to 70
- Developing a solution that could be practically implemented with existing manufacturers and did not excessively increase manufacturing costs.

BSkyB also provided agencies with brand information at this stage. Frog responded with a detailed proposal and the two organisations agreed a budget and timescales for the project.

Discover – Design – Deliver

After the initial pitch, Frog was invited to produce initial concepts for the new BSkyB set top boxes, using the process it has developed for managing all design projects which it calls Discover – Design – Deliver. Alongside this process, Frog operates a formal internal management structure for its design projects, with a Programme Manager and Creative Director responsible for coordinating all Frog's efforts and ensuring that research, client liaison and creative activities are tightly coordinated. The Creative Director is also responsible for coordinating the activities of the designers working on the project.



Accordingly, Frog approached the set top box project with an intense 'Discover' phase which was used to analyse the BSkyB brand values, consumer expectations, the manufacturing envelope and future roll-out, and rationalise these into formal design language documentation that would enable the organisation to gain significant control over future design and 3D brand representation of BSkyB.

In more depth

Read more about the [Discover](#) phase of the design process

Frog developed four concepts in line with a positioning model, which mapped out the opportunity for BSkyB to not only express key brand values (such as 'entertainment') through product design, but also to differentiate the BSkyB brand from its competitors. 'We came up with the recommendation that BSkyB needed to have a much more expressive product on the market, that it needed to create identity,' explains James Whittaker, Creative Director at Frog's German offices.

User Research

BSkyB places high priority on research - carrying out extensive user research, particularly on the ergonomics of its products and remote controls as well as the usability of its software offerings such as the on screen electronic programme guide with which users navigate the platform - and this philosophy was well complemented by Frog's capabilities in this area.



An important element of this in the BSkyB set-top box project, says Whittaker, was to give both consultancy and the client a deeper understanding of real consumer behaviours and needs. Frog and BSkyB applied a broad range of techniques including

ethnographic research and observational studies, before creating a highly detailed internal brief used to take the design processes forward.

Both Snodgrass and Whittaker emphasise, however, that user research cannot be limited to 'asking consumers what they want', and Snodgrass notes that while this research is a powerful tool to improve usability, its utility is limited for the evaluation of the industrial design of the company's products as customers rarely articulate useful feedback on these aspects of the products.

In more depth

Find out more about how [user research](#) can help identify user needs and experiences and lead to product innovation

Market

BSkyB produces its own media content, supplies channel packages to cable companies and other TV distributors and distributes content via broadband and mobile networks for consumption on a wide variety of devices. Its primary activity, however, is the distribution of more than 138 TV channels and audio content to subscribers in the UK.

BSkyB case study: design and deliver

After four weeks on the set top box project, Frog responded with around ten initial concepts, in sketch form. Snodgrass and the product managers selected preferences from these initial offerings



According to Whittaker, Frog's objective at this stage was to agree an overall concept for the design with BSkyB.

The concept that was chosen was one the Frog team christened 'flow', where the product form contrasted an outer protective shell with curved elements across the sides and front of the box which provide a glimpse of 'the juicy bits inside.'

'It's like a bit like an orange,' Whittaker explains, 'it has this protective skin but it looks like if you squeezed it, the brand essence would come out.'

With the basic design language agreed, Frog and BSkyB then worked to develop variations on this theme, designed to give the individual boxes in the range a distinct identity that would support their market position.

The basic set top box, therefore, was given a friendlier, fun appearance, while the high-end HD unit was designed to look ‘a bit more dark and mysterious, more visually powerful.’

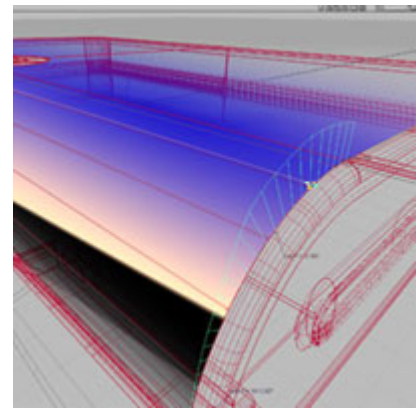
In more depth

Find out more about the [Develop](#) stage of the design process, where the product or service is ready for delivery to production

Although design consultancy Frog, BSkyB and the manufacturers had been in conversation since the start of the project, once the concept was agreed, the dialogue with the manufacturers could begin in earnest.

According to Ed Snodgrass, Product Design Manager at BSkyB, there was considerable tension early in the design process between the designers and other stakeholders in the organisation, who needed to ensure that the product could be delivered within acceptable cost, manufacturability and reliability parameters. This involved re-establishing previous PCB design constraints, and positions for card slots, connectors and status LEDs.

Once the basic dimensional constraints were established, Frog built the first 3D CAD models of the proposed solutions. From these models, machined foam mock-ups were made to allow BSkyB stakeholders to get a better grasp of the size and shape of the proposed solutions. Final approval was carried out by the company’s CEO, who, after requesting changes to form, interface, or finish, selected a single solution.



Critical at the next stage, says Snodgrass, was an understanding of the ventilation system that would be used to keep the electronics in the box cool. Different manufacturers, he explains, use different ventilation principles, with some preferring to use a fan and others relying on natural convection.

For Frog, the use of multiple manufacturers meant that it had to evolve three separate designs for the set top box, with identical outer ‘A’ surfaces, but different internal structures and supports. Another key negotiation with the manufacturers was to limit their branding to the back of the box, so that the front of the box is ‘owned by Sky.’

In the early stages of the design project, says Whittaker, Frog’s designers would communicate with the client ‘every few days,’ but this intensity increased as the engineering of the project progressed, to the point where designers, client and manufacturer were in conversation ‘several times a day. It’s about having a common goal, a common aim.’

Delivery

Snodgrass and the Frog designers then entered a detailed dialogue with the manufacturers to evolve the design to make it suitable for their manufacturing processes.

‘As we were dealing with some quite new chipsets in these products, we didn’t have some dimensions finalised until quite late in the project,’ explains James Whittaker, Creative Director at Frog's German office, ‘That meant we had to modify overall dimensions sometimes during the project.’

The manufacturers then carried out the detailed engineering of the product, a process which took up to two years, depending on the lead times for tooling, chip sets and software development.



In more depth

Read more about the [Deliver](#) stage of the design process, where the final concept is taken through to launch

Evaluation and iteration

Before production began, Snodgrass and the manufacturers worked together to fine-tune, fit and finish before pre-production units are made and sent out for user testing. Initial product field trials involved around 100 customers and were managed by the BSkyB Product Manager. Field trials resulted in small changes to software or user interface characteristics, which were integrated into the product before launch.

In more depth

Read more about how the [testing](#) of concepts and prototypes is a major part of the [Develop](#) stage of the design process

Increasingly, products are also designed with maintenance and disassembly in mind. In part, says Snodgrass, this is to make service and repair cheaper, but tightening waste legislation is also encouraging the company to produce equipment with longest possible lifetime and with easier and more cost effective recycling at end-of-life.

Once a product is in use, positive or negative customer feedback on set top box design and performance is collected at BSkyB service centres and sent to Snodgrass and his team, to be absorbed for future design revisions and product updates.

In more depth

Read about how other companies in our study use [feedback](#) to spin off into new projects or improvements

With thanks to BSkyB

Our interviewees were Ed Snodgrass, Product Design Manager at BSkyB and James Whittaker, Creative Director at the German offices of US-based design consultancy Frog, to which BSkyB outsources all its set top box design activities.



To find out more about BSkyB, visit www.sky.com

Please note

Except where expressly stated to the contrary, all copyright and rights in this content is owned by or provided with permission from the copyright holder to the Design Council. All rights are hereby reserved by the Design Council and by other copyright holders where appropriate.
